

**REMARKS**

Claims 1-14 are pending in this application. By this Amendment, claims 1-10 are amended and claims 11-14 are added.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration (as the amendments amplify issues previously discussed throughout prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; and (d) place the application in better form for appeal, should an appeal be necessary.

**I. Claim Rejection under 35 U.S.C. §112**

The Office Action rejects claims 1-10 under 35 U.S.C. §112, first paragraph, for allegedly failing to comply with the written description requirement.

By this Amendment, the claims are amended to recite a multifunction system instead of a multifunction device. Thus, Applicants respectfully request withdrawal of the rejection.

**II. Claim Rejections under 35 U.S.C. §103**

The Office Action rejects claims 1, 2, 6 and 8-10 under 35 U.S.C. §103(a) over U.S. Patent No. 5,872,869 to Shimizu et al. (Shimizu) in view of U.S. Patent No. 5,077,817 to Shang; rejects claims 4, 5 and 7 under 35 U.S.C. §103(a) over Shimizu in view of Shang, and further in view of U.S. Patent No. 5,822,475 to Hirota et al. (Hirota); and rejects claim 3 under 35 U.S.C. §103(a) over Shimizu in view of Shang, and further in view of U.S. Patent No. 6,295,148 to Atlas. Applicants respectfully traverse the rejections.

By this Amendment, claim 1 is amended to recite that the image signal input unit and first and second optical signal output units are integral with or directly connected to their corresponding image output unit or functional units. Shimizu discloses image processing apparatus (unmarked) including a reader unit 500, a printer unit 600, and an image

information generating unit 1 having an optical fiber interface 70. Because the optical fiber interface 70 is within and integral with only the image information generating unit 1, Shimizu fails to disclose the claimed image signal input unit, first optical signal output unit, second optical signal output unit, and optical signal input unit.

Regarding claim 4, the Office Action's combination of references is improper. The Office Action alleges that it would have been obvious to combine the wavelength discrimination circuit of Hirota with the disclosure of Shimizu because "it allows greater control of transmission without the need for a plurality of signal barrier propagation layers." However, Shimizu does not disclose multiple propagation layers. Because there is no alleged reduction of the number of propagation layers by modifying the disclosure of Shimizu with that of Hirota, the combination is improper.

Regarding claim 6, Shimizu fails to disclose "an arbitrating part that arbitrates the respective communications of the image output unit, the first functional unit, and the second functional unit by specifying the types of optical signals to be outputted by the first optical signal output unit and the second optical signal output unit, and the types of optical signals to be extracted by the image signal input unit and the optical signal input unit." The Office Action cites to Shimizu at col. 6, lines 38-45, and col. 5, lines 32-39, as disclosing the claimed arbitrating part, but the Office Action is incorrect. Shimizu is completely silent as to any arbitrating circuit whereby the optical standards used by the various optical interface units 70 operate. Additionally, the control signals disclosed in the cited sections do not specify the "types of optical signals to be outputted," but instead are directed to changing address data (col. 5, lines 32-39) or to controlling operations not related to the optical interface standard used (see cols. 5 and 6 leading up to the cited section of col. 6, lines 38-45). Still further, even if Shimizu's control signals controlled the optical standard used by an optical interface unit 70, the control signals generated by the CPU circuit block 10

disclosed in Shimizu do not control more than one optical interface as recited in claim 6. This is because each image processing apparatus (unmarked) of Shimizu has its own control signals. Because the Office Action cites multiple instances of Shimizu's image processing apparatus to reject the claims, the Office Action relies on the multiple independent control signals (and implicitly, the CPU circuit boards 10 which produce them) to correspond to the one claimed arbitrating part. Thus, the rejection is improper.

For the foregoing reasons, Applicants respectfully request withdrawal of the rejections.

### **III. New Claims**

By this Amendment, new claims 11-14 are added which recite further features not taught by the applied references.

### **IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance to the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Jonathan H. Backenstose  
Registration No. 47,399

JAO:JHB/ccs

Date: November 1, 2006

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--